# REVISION OF THE SCARAB BEETLES OF THE DYNASTINE GENUS ERIOSCELIS

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The three known species of this genus are very poorly known, both from a generic and specific standpoint. The genotype, *Apagonia emarginata* Mannerheim, was described in 1829, and was placed in *Erioscelis* by Burmeister in 1847, who erected the genus for it. The remaining two species were added as recently as 1914 and 1921. One new species from Peru is described herein, and the opportunity is taken to review the generic characters, discuss the species, and figure the essential characters.

## ERIOSCELIS Burmeister

Erioscelis Burmeister 1847, Hand. Entom. 5:72; Lacordaire 1856, Gen. Coleop., 3:401; Prell 1914, Ent. Mitteil., p. 197, t. 3, f. 1-2; Casey 1915, Mem. Coleop., 6:113; Hohne 1921, Deut. ent. Zeit., p. 108; Arrow 1937, Junk Coleop. Cat., 156: 19; Blackwelder 1944, Bull. U. S. Nat'l. Museum 185: 254.

Apagonia Mannerheim 1829, Nouv. Mem. Moscou, 1:54.

The genus is closely related to Cyclocephala Latreille (as represented by such more typical species such as immaculata Oliver and lucida Burmeister) and may best be characterized by citing the generic characters as compared to Cyclocephala: Male front claws not enlarged; clypeus flat (or nearly so), nonreflexed apically and trapezoidal, the sides parallel or very slightly convergent apically; the clypeus one and one-half to two or more times as broad as long, the apex truncate and varying from non-emarginate to shallowly but broadly and arcuately-emarginate; anterior tibia bidentate (emarginata), or tridentate, but similar in both sexes of each species; labrum entirely hidden from above or in frontal view; labrum free from clypeus and hung underneath it by muscular attachments (in dissection).

When compared with such species as Cyclocephala (Stigmalia) maffafa Burmeister, or C. (Aclinidia) castanea (Fabricius), the only character definitely to separate Erioscelis is the unen-

larged front tarsal claws of both sexes.

Monidia nigerrima (Bates), and related large and nigropiceous or piceocastaneous species resemble *E. emarginata* closely but are more piceous and the front male claws are enlarged; this nigerrima was described as a Cyclocephala and separated by Casey on the broad head, color, and large and flat clypeus into the new genus Monidia, which might be valid but must await a restudy of all Casey's proposed genera based on the much larger number of species known today.

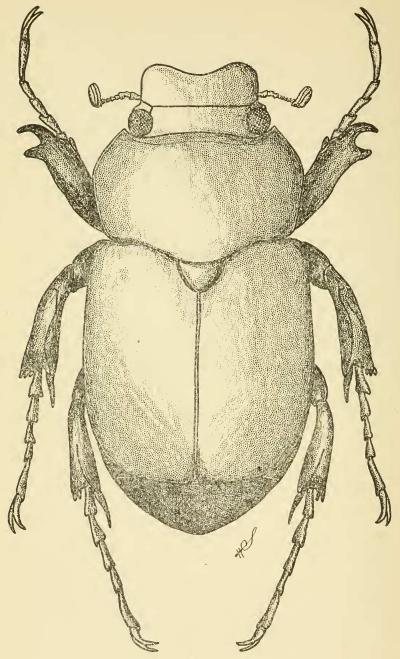


Fig. 1. Erioscelis emarginata (Mann.), o.

Casey mentioned *Erioscelis* in his key to the genera of the Tribe Cyclocephalini, but I am unable to guess what genus he really had before him, since he mentioned that the anterior male tarsal claw was very large, whereas it is not enlarged in either

sex of this genus.

The sexes are remarkably similar in this genus in nearly all essential characters, and the only real difference is in the 6th abdominal sternite: in the male this is transversely carinate at about the apical third and the carina bears a single row of long cilia, and the carinate row is also usually bisinuate in most examples (Fig. 2, f); this sternite in the female is ciliate nearly at and along the apical margin of the sternite, and the ciliate row is thus arcuately rounded (Fig. 2, g).

### KEY TO THE SPECIES

- - Clypeus truncate, or nearly so; fore tibia tridentate; dorsal surface and pygidium coarsely punctate.....
- 2. Color black; thorax with central third usually entirely impunctate; center of front less densely punctate and punctures somewhat finer at the middle; male genitalia Fig. 2, b. (Peru, Bolivia and Brazil)...

Color castaneous; central third of thorax always obviously punctate but the punctures may be minute.....

# Erioscelis peruana, new species

Male: Castaneous; dorsally highly polished; glabrous above. The small antenna 10-segmented, club equal to funicle but ovate and relatively minute. Head half as wide as thorax. Clypeus faintly but evenly convex, twice wider than long, sides nearly parallel, but faintly convergent apically; apex not reflexed, faintly emarginate, the angles narrowly rounded; entire clypeus strongly margined; clypeal suture faint but definite and nearly straight; disc of clypeus and front coarsely, moderately-densely punctured. Eyes very large, but only one-fourth exposed from above. Thorax twice wider than long, base entirely unmargined, sides and front edges strongly margined, the margins entire and not ciliate; sides roundly dilated at middle and convergent and straight both apically and basally; base faintly sinuate each side of middle; front angles semi-

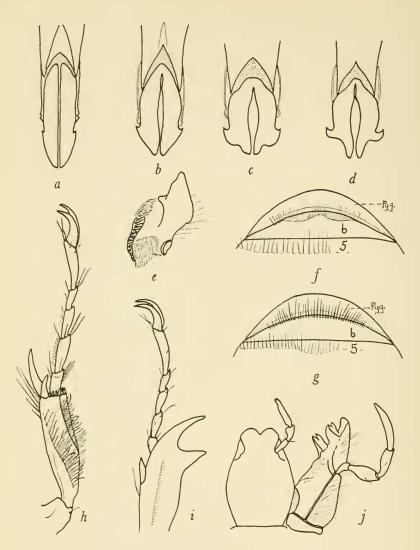


Fig. 2. Erioscelis emarginata (Mann.). a. o genitalia, e. mandible; f. apical sternites of ♂; g. apical sternites of ♀; h. posterior tibia and tarsus of ♂; i. anterior tibia and tarsus of  $\sigma$ ; j. mouthparts.

Erioscelis obtusa Prell. b. o genitalia. Erioscelis peruana Saylor, c. o genitalia. Eroscelis sobrina Hohne, d. o genitalia.

rectangular but bluntly so, hind angles broadly rounded, disc at center with very minute and sparse punctures, the punctures near edges and sides much larger and not very dense, separated by 2-3 times their diameters. Scutellum smooth, with half a dozen minute punctures. Elytra serially striate, the punctures in the rows moderately coarse and separated by once to twice their diameters. Propygidium very densely, finely, contiguously, and subrugosely punctate, the punctures much coarser right at the angles. Pygidium large, two and one-half times wider than long, highly polished, smooth; disc with very coarse, moderately-densely, somewhat irregularly placed punctures, a few punctures at middle with minute erect hairs (high magnification), apex non-ciliate. Abdomen polished, smooth, except for a single, transverse, subapical row of setigerous punctures on each sternite (ciliate row on 5th in male is widely interrupted at middle, but entire in female); sternites 2-4 equal, 5th one and one-half times longer than 4th and smooth at center; 6th shorter than 5th and slightly transversely impressed along basal margin. Hind tibia with two oblique rows of setae (Fig. 2, h) running nearly the entire length of the tibia; first segment of hind tarsi twice longer than width at apex, and only slightly longer than either the 2nd or 3rd, none of them triangular in shape. Front tibia tridentate. Length 19 mm. Width 9.5 mm.

The unique male holotype in the Saylor Collection is from "Rio Abujao, Peru." The genitalia are distinctive (Fig. 2, c) but it is very difficult to separate on external characters from sobrina other than on locality and the less coarse dorsal puncturation, although the genitalia of the two species will readily distinguish them.

#### Erioscelis sobrina Hohne

E. sobrina Hohne 1921, Deut. ent. Zeit., p. 108.

Male: Very close to peruana Saylor in color and all respects except as follows: puncturation of sides of thorax and elytra much coarser and better marked, the subapical ciliate carina of 6th sternite distinctly bisinuate, and the male genitalia different (Fig. 2, d). Length 17-20 mm. Width 9-10.5 mm.

Described from Valencia in Venezuela, and I have seen it only from that country.

#### Erioscelis obtusa Prell

E. obtusa Prell 1914, Ent. Mitteil., 3:197, t. 3, f. 1-2.

Male: Very close to peruana Saylor, except as follows: Color black rather than castaneous or rufocastaneous, the central thoracic area usually entirely impunctate and the male genitalia different (Fig. 2, b).

Female: Very similar to male except as follows: fore tibia a little stouter; pygidium less densely punctate apically; 6th sternite with a complete, arcuate, marginal row of cilia along the subapex. Length, 17–18 mm. Width, 9.5–10.5 mm.

The species was described from two pairs from Chanchamago, Peru. I have seen a female from "Bolivia," and examples of both sexes from various Peruvian areas: "Near Sani-Beni, Lima, Peru; 1935, Felix Woytkowski Collector" ("an area at 840 elevation, in a tropical, still hilly region of forests, 8 km. E. of Satipo, in Dept. of Junin"); and "Peru-Brazil Frontier, February".

# Erioscelis emarginata (Mannerheim)

Apagonia emarginata Mannerheim 1829, Nouv. Mem. Moscou, 1:54. Erioscelis emarginata (Mann.), Burmeister 1847, Hand. Entom. 5:73.

Male: Similar to peruana Saylor, except as follows: Dark castaneous to piceocastaneous; front tibia bidentate; clypeus very distinctly and widely emarginate apically; hind angles of thorax a little more obvious; base of thorax margined at sides and nearly to the middle; head and thorax usually entirely impunctate; elytra smooth, with a few punctures visible near sides; pygidium very convex, very smooth and usually entirely impunctate except for a few punctures before apex, transverse lines of cilia on sternites complete, not interrupted at middle; genitalia very different (Fig. 2, 2).

Female: Similar to male in all respects except as follows: large subapical pygidial punctures reduced to only several; ciliate line of 6th sternite arcuate and nearly apical in position (Fig. 2, g). Length, 19-24 mm. Width, 10.5-12 mm.

I have seen specimens from BRAZIL: "Nova Teutonia, Nov. and Dec., Fritz Plaumann," and "Ypiranga, Sao Paula, Nov.," and "Brazil"; from PARAGUAY: "Horqueta, Alberto Schultz Collector," and "Ipane River, March, A. Schultz Coll.". Recorded also from ARGENTINA by Hohne. The general facies of this insect are very distinctive and it may be readily picked out of miscellaneous lots of neotropical scarab beetles.